

Message Text

PAGE 01 NATO 07090 01 OF 02 241503Z

53

ACTION EUR-12

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TO SECDEF WASHDC

SECSTATE WASHDC 9424

INFO NRL WASHDC

USNMR SHAPE

ONRL LONDON

AMEMBASY LONDON

AMEMBASSY BONN

USLOSACLANT

CINCLANT

CINCUSAFE

AMEMBASSY ROME

USCINCEUR

C O N F I D E N T I A L SECTION 1 OF 2 USNATO 7090

E.O. 11652: GDS

TAGS: OCON, NATO, MILI

SUBJECT: FIRST MEETING OF DRG PANEL IX ON 17-19 DEC 74

NRL FOR TAC EW DIV (MR. COSBY)

REF: AC/243-D/347

BEGIN SUMMARY: PANEL IX, THE DRG EXPLORATORY PANEL ON ELECTRONIC WARFARE CONCEPTS AND TECHNOLOGY MET ON 17-19 DEC 74 TO BEGIN A STUDY ON AIR DEFENSE OVER THE BATTLEFIELD WITH THE GOAL OF REACHING ALLIANCE AGREEMENT ON A CAREFULLY TAILORED, BALANCED, SYSTEMATIC APPROACH TO ELECTRONIC WARFARE. SIX NATIOS AGREED TO PREPARE EXPLORATORY WORKING PAPERS ON VARIOUS ASPECTS OF THE STUDY BY THE NEXT MEETING ON 2-4 APR 75. THE US TENTATIVELY AGREED TO DO PAPES
CONFIDENTIAL

PAGE 02 NATO 07090 01 OF 02 241503Z

ON ESCORT SCREENING JAMMING AND ECCM TECHNIQUES USING EO AND IR BACKUPP SENSORS. END SUMMARY.

1. DRG PANEL IX, THE EXPLORATORY PANEL ON ELECTRONIC WARFARE

CONCEPTS AND TECHNOLOGY HELD ITS FIRST MEETING ON 17-19 DE 1974 AT NATO HEADQUARTERS. REPRESENTATIVES FROM BELGIUM, DENMARK, FRANCE, GERMANY, THE NETHERLANDS, UK, US, INTERNATIONAL STAFF, SHAPE AND NEWAC ATTENDED. COL R. G. JENKS, USNATO, ALTERNATE US MEMBER AND CMDR JORDAN, ONRL, ATTENDED FOR THE US. THE PANEL ELECTED NR. BERNARD MILNER (UK, ROYAL RADAR ESTABLISHMENT) AS CHAIRMAN.

2. THE UK MADE AN IMPROMTU PRESENTATION ON LHE DEPLOYMENT AND MODE OF OPERATION OF STAND-OFF JAMMERS. THE PANEL AGREED TO ACCEPT THE UK ESTIMATE FOR THE AAR FUTURE THAT 5 WATTS OF RF POWER COULD BE PRODUCED PER POUND OF TOTAL SYSTEM WEIGHT AS A STRAW MAN OR BASE LINE FIGURE PENDING FURTHER INFORMATION. IN THIS RESPECT THE PANEL QUESTIONED WHETHER THE RF POWER GENERATION CAPABILITIES PRESENTED IN AN ARTICLE: TWT'S-POWER ATTAINABLE?, THE PROCEEDINGS OF THE IEEE, VOL 61, #3 MAR 73 BY J. MENDEL OF HUGHES WERE CREDIBLE OR COMPANY BROQUREMANSHIP. THE US ACCEPTED AN ACTION ITEM TO COMMENT ON THE CREDIBILITY OF THE ARTICLE AND OFFER ANY RELATED INFORMATION AVAILABLE ON ESTIMATED POWER GENERATION CAPABILITIES IN THE NEAR FUTURE. THE PANEL BELIEVES THIS DATA WOULD BE USEFUL IN ITS CURRENT STUDY AS WELL AS PROVIDING A STARTING POINT WHEN THE PANEL CONSIDERS WHETHER TO STUDY POWER GENERATORS (ANNEX V, REF DOC).

3. THE PANEL APPROVED ITS TERMS OF REFERENCE (ANNEX II TO REF DOC) AND DISCUSSED ITS METHOD OF WORK.

4. THE PANEL THEN TURNED TO THE TERMS OF REFERENCE AND METHOD OF WORK FOR ITS FIRST DRG APPROVED STUDY ON "SELECTED ASPECTS OF EW RELATING TO AIR DEFENSE OVER THE LAND" (ANNEX III TO REF DOC). THE PANEL GENERALLY AGREED THAT IT WOULD HAVE TO LIMIT THE SUBJECT CONSIDERABLY IN ORDER TO PRODUCE A REPORT FOR THE DRG BY MAR 76. THE PANEL DECIDED TO RESTRICT THE STUDY TO AIR DEFENSE OVER THE BATTLEFIELD AND PLACE INITIAL PRIORITY ON EW/RADAR RELATIONSHIPS, HOWEVER, THE PANEL WOULD ALSO CONSIDER EW WITH RESPECT TO OPTICAL AND IR SYSTEMS WHICH BACK-UP BATTLEFIELD RADAR SENSORS (AS IN AN ECCM ROLE) TO THE EXTENT POSSIBLE.
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PAGE 03 NATO 07090 01 OF 02 241503Z

THE PANEL MADE THE FOLLOWING CHANGES TO ANNEX III:

PARA 1; END OF FIRST SENTENCE, ADD - FROM BOTH AN OFFENSIVE AND DEFENSIVE VIEWPOINT.

PARA 2; ECM TACTICAL ROLES, SUB-ITEM II (SST) ADD NOTES - (1), (2); NOTE (1) - INCLUDING MUTUAL SCREENING, NOTE (2) - INCLUDING RPV'S. SUB-ITEM III, CHANGE TO READ - ESJ - ESCORT SCREENING JAMMING, PLUS NOTES (1), (2). ADD NEW SUB ITEM (V) - (V) XJ - EXPENDABLE JAMMERS.

PARA 2, ECM TECHNIQUES, ADD TO SUB ITEM (VIII) CHAFF - AND OTHER DECOYS

PARA 2, AIR DEFENSE RADAR SENSORS, ADD TO SUB-ITEM (III)(B) -
AND DATA LINKS

PARA 6, PROCEDURE, INSERT AFTER ELECTRONIC WARFARE - AS WELL
AS ITS VULNERABILITY TO OTHER FORMS OF WARFARE

5. THE PANEL AGREED THAT THE STUDY EFFORT WOULD HAVE TO BE
DIVIDED INTO PARTS WHICH WOULD BE ACCOMPLISHED BY INDIVIDUAL
COUNTRIES AND THESE COUNTRIES SHOULD PREPARE AN AREA SUMMARY OR
EXPLORATORY WORKING PAPER ON THEIR AREAS OR PARTS PRIOR TO THE
NEXT WORKING MEETING. IN SO FAR AS POSSIBLE AUTHORS OF THESE
PAPERS SHOULD APPROACH THE EW RELATIONSHIPS FROM THE BLACK BOX
OR MODULAR STANDPOINT (VS A PARTICULAR TACTICAL SITUATION R
THREAT SCENARIO) THUS PROVIDING BUILDING BLOCKS WHICH COULD BE
USED AS NECESSARY IN ANY SCENARIO. ALSO THE AUTHOR SHOULD TREAT
THE EFFECTS AND RELATIONSHIPS INTRODUCED BY GEOMETRY AND THE NUMBER
OF JAMMERS/SENSORS IN A RELATIVE MANNER. A NORMALIZED JAMMING
THREAT SHOULD BE USED WHERE POSSIBLE. AUTHORS SHOULD NOT DEAL
WITH SPECIFIC SENSORS OR EW EQUIPMENT BUT APPROACH THE SUBJECT
FROM THE VIEWPOINT OF RELATIONSHIPS BETWEEN OR EFFECTS ON GENE-
RALIZED TYPES OF EQUIPMENT.

6. THE PANEL DECIDED TO DIVIDE THE SUBJECT INTO PARTS ACCORDING
TO THE ECM TACTICAL ROLES LISTED IN ANNEX III (REF DOC) HOWEVER IN
TWO OR THREE CASES IT ASSIGNED TOPICS THAT DEAL WITH PARTICULAR
TECHNOLOGIES WHICH CUT ACROSS THE BOARD. NATIONS ACCEPTED
FIRM OR CONDITIONAL ASSIGNMENTS AS FOLLOWS:
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PAGE 04 NATO 07090 01 OF 02 241503Z

UK(FIRM): (I) SOJ PLUS AN ANALYSIS OF THE INFLUENCE OF PAIRS
OF SSTs ON SAM GUIDANCE HOMING HEADS.
FRG(FIRM): (II) SSJ MINUS THE UK DUAL SSJ/GUIDANCE WORK ABOVE.
NL(FIRM): ECCM PROPERTIES OF RADAR INC DECOY RADARS.
DE (FIRM): SIMULATION PROGRAM ON THE EFFECT OF JAMMING ON
LONG RANGE EARLY WARNING SURVEILLANCE RADARS (ONLY PRELIMINARY
REPORT WILL BE AVAILABLE BY NEXT MEETING).

CONFIDENTIAL

PAGE 01 NATO 07090 02 OF 02 241513Z

53
ACTION EUR-12

INFO OCT-01 ISO-00 SS-15 NSC-05 CIAE-00 PM-03 INR-05 L-02

ACDA-05 NSAE-00 PA-01 RSC-01 PRS-01 SP-02 USIA-06

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R 241027Z DEC 74

FM USMISSION NATO
TO SECDEF WASHDC
SECSTATE WASHDC 9425
INFO NRL WASHDC
USNMR SHAPE
ONRL LONDON
AMEMBASY LONDON
AMEMBASSY BONN
USLOSACLANT
CINCLANT
CINCUSAFE
AMEMBASSY ROME
USCINCEUR

C O N F I D E N T I A L SECTION 2 OF 2 USNATO 7090

FR(CONDITIONAL): (V) EXPENDABLE JAMMERS.

US(CONDITIONAL): ANALYSIS OF ECCM TECHNIQUES USING OPTICAL AND IR BACK-UP FOR RADARS AND RELATED ECM AGAINST SUCH TECHNIQUES ALONG THE LINES OF PARA 5 ANNEX III (REF DOC), AND/OR (III) ESJ. THERE WERE NO VOLUNTEERS FOR (IV) GBJ'S. COMMENT: THE ALTERNATE US REPRESENTATIVE EXPLAINED TO THE PANEL THAT THE US FULLY SUPPORTED THE WORK DEFINED BY ANNEX III (REF DOC) AND WOULD PARTICIPATE IN THE "HOME WORK" BETWEEN MEETINGS; HOWEVER, HE WAS WITHOUT GUIDANCE WITH RESPECT TO WHAT SPECIFIC TASKS THE US WOULD PREFER TO ACCEPT; THEREFORE HE WOULD RECOMMEND TO HIS AUTHORITIES THAT THE US UNDERTAKE ONE OR BOTH OF THE EXPLORATORY PAPERS DESCRIBED ABOVE BUT THAT THE OFFER WAS CONDITIONAL PENDING CONFIRMATION OR APPROVAL. THE ALTERNATE US REP BELIEVES THAT IF THE US DOES NOT UNDERTAKE THE TASK IN THE EO/IR AREA, THE PANEL WILL NEGLECT THIS ASPECT UNTIL IT IS TOO LATE TO PRODUCE MEANINGFUL
CONFIDENTIAL

PAGE 02 NATO 07090 02 OF 02 241513Z

INPUTS FOR A MAR 76 REPORT. END COMMENT:

7. THE PANEL DISCUSSED ANNEX IV (REF DOC) ON SEVERAL OCCASIONS AND HAD DIFFICULTY ARRIVING AT ANY CONCLUSIONS. THE FRG REPEATEDLY EMPHASIZED THE URGENCY FOR SOME EFFORT, AT LEAST OF THE "BRAIN STORMING" TYPE, ON THE EO & IR EW ANTI-ARMOUR PROBLEM. WHILE MOST MEMBERS AGREED IN PRINCIPLE, THEY FOUND ABUNDANT EXCUSES FOR DOING NOTHING FOR THE PRESENT. THE US AND SHAPE SUPPORTED THE FRG. THE PANEL FINALLY AGREED TO PROVIDE THE FOLLOWING GUIDANCE OR SUGGESTIONS TO THE FOUR "WISEMEN" WHO MEET IN JANUARY. NOTE: THE MEETING OF THE FOUR "WISEMEN" IS A SPECIAL MEETING OF FOUR MEMBERS OF THE DRG OR THEIR PERSONAL REPRESENTATIVES TO INVESTIGATE WHETHER THERE IS SUFFICIENT INTEREST AND AVAILABLE EFFORT AND DATA TO MAKE A STUDY ALONG THE LINES OF ANNEX IV (REF DOC) OR THE EO/IR ANTI-ARMOUR PORTION OF THE ANNEX WORTHWHILE. END NOTE. IN ESSENCE, THE PANEL AGREED TO ENCOURAGE THE "WISEMEN" IN THEIR EFFORT AND STATED THAT THE PANEL WOULD BE WILLING TO ESTABLISH AN EXPLORATORY RSG OR WORKING GROUP ON OPTICAL AND IR EW IF THE WISEMEN DECIDE IT IS APPROPRIATE AND

THE "TIME IS RIPE" TO DO SO.

8. DENMARK DISCUSSED THE IMPORTANCE OF THE EW ASPECTS OF COMMUNICATIONS AND AGREED TO PREPARE THE TERMS OF REFERENCE FOR A PROPOSED FUTURE STUDY EFFORT ON THE SUBJECT FOR THE PANEL TO CONSIDER. THE US OFFERED TO DETERMINE THE AVAILABILITY OF A BRIEFING, IF THE PANEL SHOULD REQUEST IT, ON SPREAD SPECTRUM MULTIPLE ACCESS JAM RESISTANT COMMUNICATIONS, WHICH THE US WILL PRESENT TO THE MARCH 75 NAFAG.

9. THE PANEL AGREED TO ACCEPT THE ONLY AVAILABLE DATES AT NATO HQS OF 4-6 JUNE 75, 8-11 SEPT 75, AND 1-4 DEC 75 FOR FORMAL PANEL MEETINGS. THE PANEL RECOGNIZED THAT WORKING GROUP MEETINGS AT OTHER LOCATIONS WOULD PROBABLY BE REQUIRED BETWEEN THESE MEETINGS. THE WORKING GROUP MEETINGS WILL BE ESSENTIALLY THE SAME AS FORMAL PANEL MEETINGS EXCEPT FOR TRANSLATION AND DOCUMENTATION REQUIREMENTS, AND ALL NATIONS ARE ENCOURAGED TO ATTEND ALL MEETINGS. THE FIRST WORKING GROUP MEETING IS SCHEDULED FOR 2-4 APRIL 75 AT THE STC IN THE HAGUE OR IN THE UK. THE SECRETARY WILL DISTRIBUTE A FORMAL NOTICE OF THE WORKING GROUP MEETING IN LATE JANUARY, INCLUDING A LIST OF NAMES AND ADDRESSES OF PRINCIPAL PANEL IX MEMBERS.
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PAGE 03 NATO 07090 02 OF 02 241513Z

10. THE PANEL ENCOURAGED NATIONS TO DISTRIBUTE COPIES OF THEIR EXPLORATORY WORKING PAPERS DIRECTLY TO PRINCIPAL MEMBERS, WITH A COPY TO ING GEN NASLIN, HEAD, DEFENSE RESEARCH SECTION, HQ'S NATO, IN ADVANCE OF THE 2-4 APRIL MEETING IF POSSIBLE. HOWEVER, REPRESENTATIVES SHOULD BRING SUFFICIENT COPIES TO THE MEETING IN CASE THE PAPERS ARE NOT RECEIVED. IF TIME DOES NOT PERMIT PREDISTRIBUTION, REPRESENTATIVES SHOULD BRING SUFFICIENT COPIES FOR EACH PRINCIPAL MEMBER TO THE 2-4 APRIL MEETING, AND PRESENT A SHORT SUMMARY BRIEFING OF THE PAPER TO THE PANEL. AUTHORS SHOULD ATTEMPT TO CLASSIFY THE EXPLORATORY PAPERS AT THE CONFIDENTIAL LEVEL OF LOWER IF POSSIBLE.

11. SUMMARY OF US ACTION ITEMS:

A. COMMENT ON CREDIBILITY OF THE IEEE TWT ARTICLE AND PROVIDE AVAILABLE RELATED INFORMATION AS APPROPRIATE AT 2-4 APRIL MEETING.

B. SUBMIT NAME AND ADDRESS OF PRINCIPAL US PANEL IX MEMBER TO ING GEN NASLIN, HEAD, DEFENSE RESEARCH SECTION, NATO HQ'S BY 10 JAN 75 (INFOR USNATO).

C. ADVISE PANEL IX CHAIRMAN AND NATO DEFENSE RESEARCH SECTION (THROUGH USNATO OR INFO USNATO) IF US WILL ACCEPT RESPONSIBILITY FOR ONE OR BOTH EXPLORATORY WORKING PAPERS DISCUSSED IN PARA 7 ABOVE, OR SUMIT ALTERNATE PROPOSAL.

D. PREPARE EXPLORATORY WORKING PAPERS BY 2-4 APR MEETING...

E. DETERMINE THE AVAILABILITY OF THE US SEEK BUS BRIEFING (TO BE PRESENTED BY THE US TO THE MARCH 75 NAFAG), IF REQUESTED FOR A FUTURE PANEL IX MEETING. BRUCE

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<< END OF DOCUMENT >>

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